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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,305	07/29/2003	Masao Goto	K06-159567M/AT	4472

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EXAMINER	
AFZALI, SARANG	

ART UNIT	PAPER NUMBER
3726	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/628,305	GOTO ET AL.	
	Examiner	Art Unit	
	Sarang Afzali	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed 5/19/2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) *1,3 and 4* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The applicant's amendment filed on 5/19/2006 has been fully considered and made of record.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The Examiner objected to the Abstract in an office action mailed on 1/23/2006 for being too long. The Applicant, to this date, has failed to respond to this objection.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A CARBURIZED ROLLER MEMBER MADE OF HIGH CARBON CHROMIUM STEEL.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Goto (EP 1099869 A2) or under 35 U.S.C. 102(e) as being anticipated by Goto (US 6,537,390). Note that '390 is a patent family member of '869.

Goto teaches (Abstract, lines 3-5) a carburized C-Cr steel bearing comprising a surface portion defined as a range from a surface of a rolling face until a depth where a maximum shearing stress acts on, said surface portion containing carbon in total amount between 1.0 to 1.5 wt% (within the claimed range of 1.0 to 1.6 wt%) and an amount of residual austenite being 25 to 45 vol% (overlaps claimed range of 20 to 35 vol%); wherein a compression residual stress of said surface portion is 150 to 2000 MPa (overlaps the claimed range of 150 to 1000 MPa), wherein a surface hardness of said surface portion is 64 to 66 in Rockwell C hardness (overlaps the claimed range of 64 HRC or higher), wherein carbides precipitate on said surface portion, an amount of

said carbides is 10 to 25% in carbide area ratio and a particle size of each carbide is 3 μm or less.

Note that the Applicant is claiming an end product that contains certain carbon content which Goto '869 and Goto '390 clearly teach. Since the Applicant is not claiming a process/method of reaching the end product, therefore, it is immaterial as how Goto '869 and Goto '390 arrive at the final carbon content.

Furthermore, note that the overlap in property and compositional limitations establishes a prima facie case of obviousness since it would be obvious to one skilled in the art to select the claimed ranges over the broader disclosure of the prior art since the same utility is taught (anti- friction bearing having long service life), see MPEP 2144.05.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (EP 1099869 A2) in view of Toda (US 6,251,197).

Goto '869 teach the claimed invention with the exception of explicitly teaching the SUJ2 steel.

Note that the difference in material of bearing steel would not be a patentable difference. It would be well within the skill of the artisan to incorporate slightly different but analogous steel alloys (such as carburizing steel SUJ2 as taught by Toda '197) into the rolling member of Goto '869 to produce no new and unexpected results.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 2 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of Application No. 10/293,368 as amended on 4/14/2006.

As applied to claims 2 and 5, although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed ranges of property

and compositional limitations are either within or overlap the ranges disclosed by '368 Application and this would establish a prima facie case of obviousness since it would be obvious to one skilled in the art to select the claimed ranges over the ranges of the prior art since the same utility is taught (antifriction bearing having long service life), see MPEP 2144.05.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

10. Applicant's arguments filed 5/19/2006 have been fully considered but they are not persuasive.

11. As for claim 2, under Remarks, page (2), paragraph (4), and page (3), paragraph (1), Applicant argues that Goto '869 fails to teach Applicant's claimed invention including a roller member including high carbon chromium bearing steel having a carburization treatment and further argues on page (3), paragraph (5) that Goto '869 fails to teach Applicant's claimed invention including a roller member which includes an amount of residual austenite comprising a range of 20 to 35 vol%.

The Examiner respectfully disagrees with the above arguments. The Examiner considers that the limitations "surface portion containing carbon in total amount being 1.0 to 1.6 wt% and an amount of residual austenite being 20 vol% to 35 vol%" as claimed are indeed taught by Goto '869 as paragraph [0010], line 2, teaches rolling should be 0.75 to 1.3 wt. % in carbon content and paragraph [0010], line 3, teaches 25 to 45% in residual austenite content.

The Applicant argues under "Remarks", page (3), paragraph (2), that Goto '869 teaches a low carbon steel at less than 0.3% carbon, rather than a bearing steel having greater than 1.0 wt% carbon. The Examiner agrees that Goto '869 starts with a blank of 0.15 to 0.3 wt. % in carbon content, however after the carburizing treatment the resulting carbon content of 0.75 to 1.3 wt. % overlaps the claimed range of 1.0 to 1.6 wt. %. Note that the Applicant is claiming an end product that contains certain carbon content which Goto '869 clearly teaches. Since the Applicant is not claiming a process/method of reaching the end product, therefore, it is immaterial as how Goto '869 arrives at the final carbon content.

Furthermore, note that Goto '869 teaches both the carbon content and residual austenite content in a same embodiment (both in Abstract, lines 3-5 and in paragraph [0010]) contrary to what the Applicant is arguing under "Remarks", page (3), paragraph (5) that there are two different embodiments one teaching the carbon and the other teaching the residual austenite content limitations.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA
7/27/2006

DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER
8/1/06